and dairy product analogs as defined in §170.3(n)(10) of this chapter; 0.5 percent for chewing gum as defined in §170.3(n)(6) of this chapter; 9.0 percent for condiments and relishes as defined in §170.3(n)(8) of this chapter; 0.5 percent for fats and oils as defined in §170.3(n)(12) of this chapter; 3.0 percent for gravies and sauces as defined in §170.3(n)(24) of this chapter; 0.6 percent for meat products as defined in §170.3(n)(29) of this chapter; and 0.15 percent or less for all other food categories. The ingredient may also be used in boiler water additives at levels not to exceed current good manufacturing practice.

(e) Prior sanctions for this ingredient different from the uses established in this section do not exist or have been waived.

[47 FR 27814, June 25, 1982]

## §184.1007 Aconitic acid.

- Aconitic acid (1, 2, 3-(a) propenetricarboxylic acid  $(C_6H_6O_6),$ CAS Reg. No. 000499-12-7) occurs in the leaves and tubers of Aconitum napellus other Ranunculaceae. Transaconitic acid can be isolated during sugarcane processing, by precipitation as the calcium salt from cane sugar or molasses. It may be synthesized by sulfuric acid dehydration of acid. but not methanesulfonic acid method.
- (b) The ingredient meets the following specifications:
- (1) Assay. Not less than 98.0 percent of  $C_3H_3(COOH)_3$ , using the "Food Chemicals Codex," 4th ed. (1996), pp. 102-103, test for citric acid, which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51, and a molecular weight of 174.11. Copies of the material incorporated by reference are available from the National Academy Press, Box 285, 2101 Constitution Ave. NW., Washington, DC 20055 (Internet address http://www.nap.edu), or may be examined at the Center for Food Safety and Applied Nutrition's Library, Food and Drug Administration, 5100 Paint Branch Pkwy., College Park, MD 20740, or at the Office of the Federal Register, 800 North Capitol St. NW., suite 700, Washington, DC.

- (2) Melting point. Not less than 195  $^{\circ}$ C and the determination results in decomposition of aconitic acid.
- (3) Heavy metals (as Pb). Not more than 10 parts per million.
- (4) Arsenic (as As). Not more than 3 parts per million.
  - (5) *Ôxalate*. Passes test.
- (6) Readily carbonizable substances. Passes the test for citric acid of the "Food Chemicals Codex," 4th ed. (1996), pp. 102–103, which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. The availability of this incorporation by reference is given in paragraph (b)(1) of this section.
- (7) Residue on ignition. Not more than 0.1 percent as determined by the "Food Chemicals Codex," 4th ed. (1996), pp. 102-103, test for citric acid, which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. The availability of this incorporation by reference is given in paragraph (b)(1) of this section.
- (c) The ingredient is used as a flavoring substance and adjuvant as defined in §170.3(o)(12) of this chapter.
- (d) The ingredient is used in food, in accordance with \$184.1(b)(1), at levels not to exceed good manufacturing practice. Current good manufacturing practice results in a maximum level, as served, of 0.003 percent for baked goods as defined in \$170.3(n)(1) of this chapter, 0.002 percent for alcoholic beverages as defined in \$170.3(n)(2) of this chapter, 0.0015 percent for frozen dairy products as defined in \$170.3(n)(20) of this chapter, 0.0035 percent for soft candy as defined in \$170.3(n)(38) of this chapter, and 0.0005 percent or less for all other food categories.
- (e) Prior sanctions for this ingredient different from the uses established in this section do not exist or have been

[43 FR 47724, Oct. 17, 1978, as amended at 49 FR 5610, Feb. 14, 1984; 64 FR 1759, Jan. 12, 1999]

## §184.1009 Adipic acid.

(a) Adipic acid ( $C_6H_{10}O_4$ , CAS Reg. No. 00124-04-9) is also known as 1,4-butanedicarboxylic acid or hexanedioic acid. It is prepared by nitric acid oxidation of cyclohexanol or cyclohexanone or a mixture of the two.